

FIG. 1A

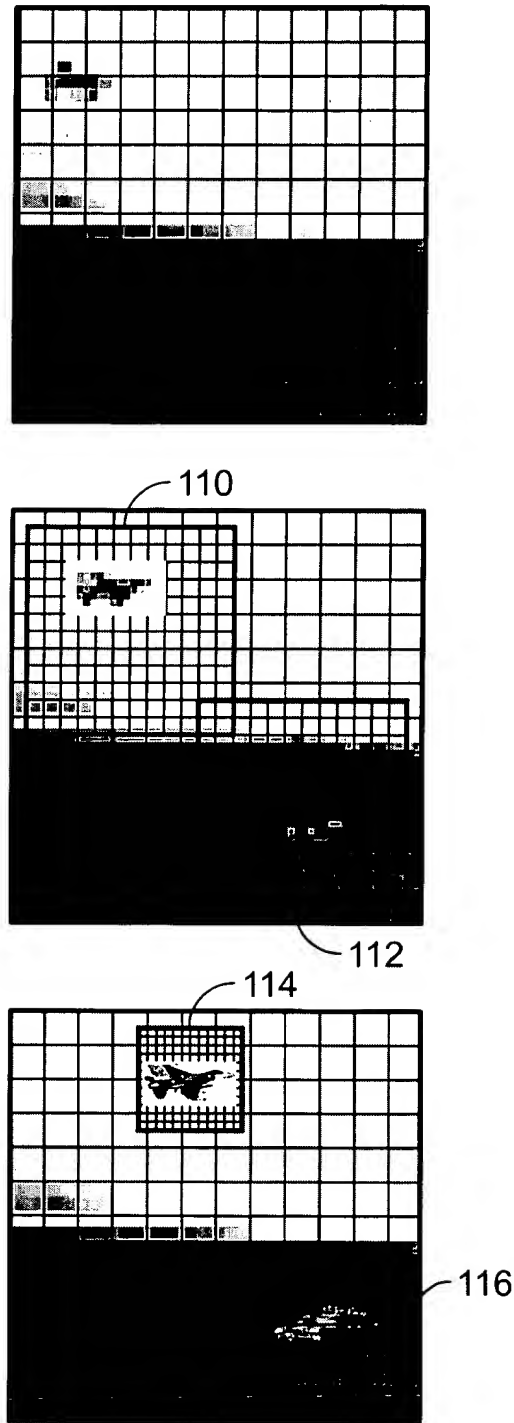


FIG. 1B

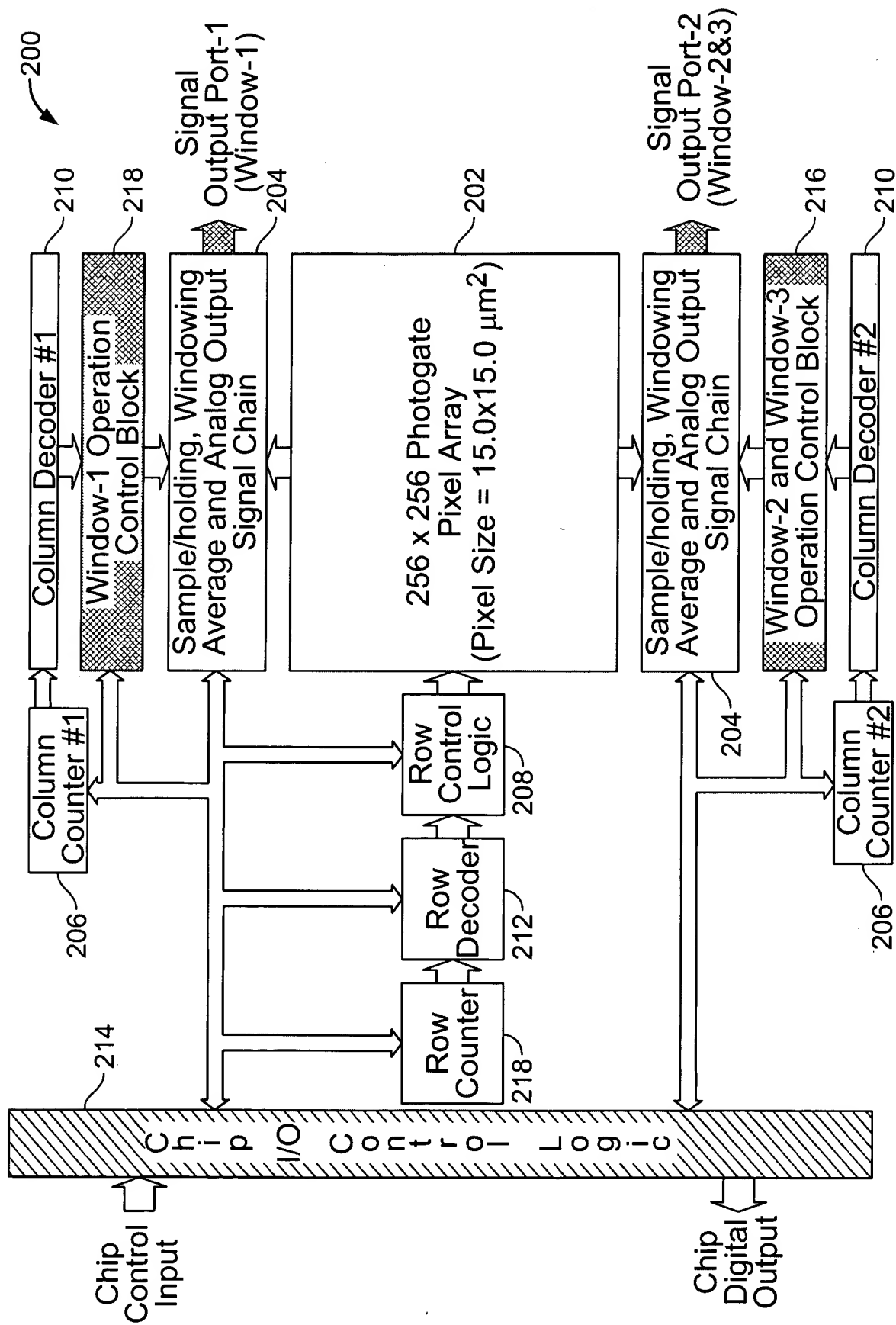


FIG. 2A

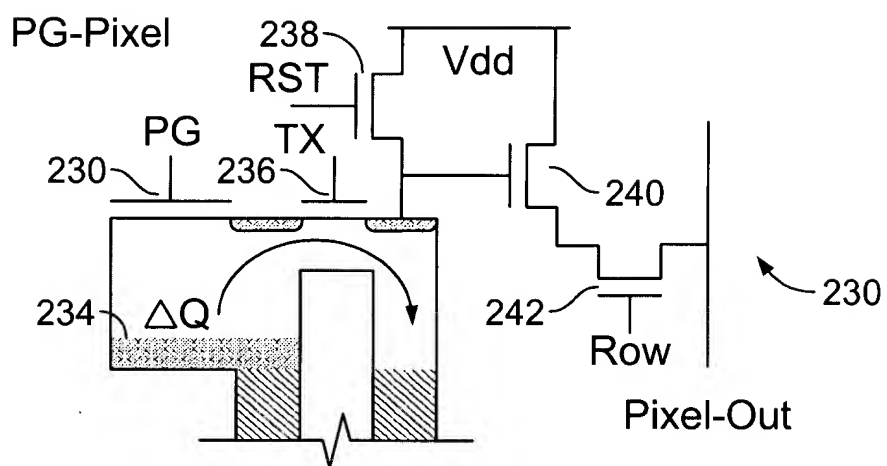


FIG. 2B

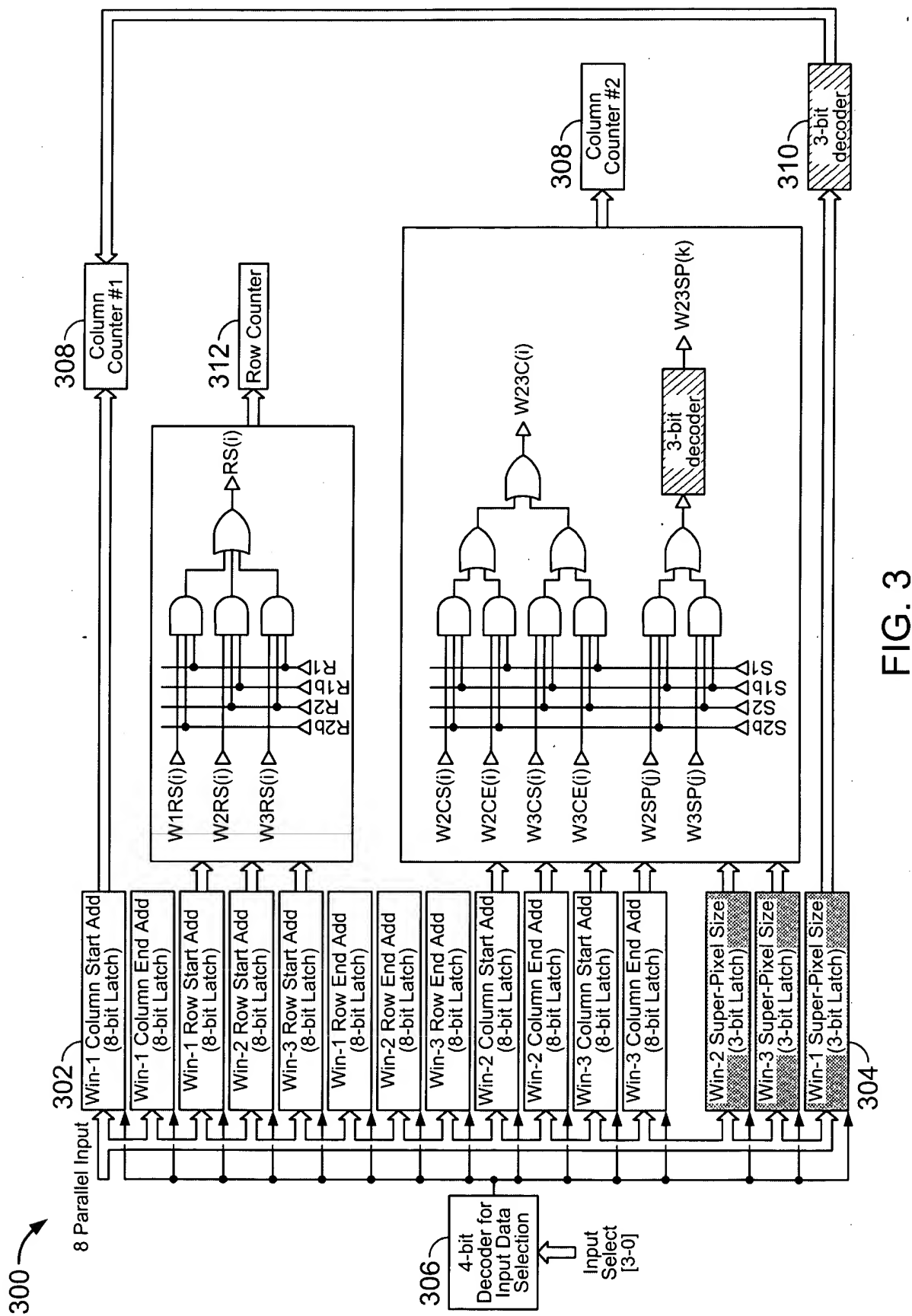
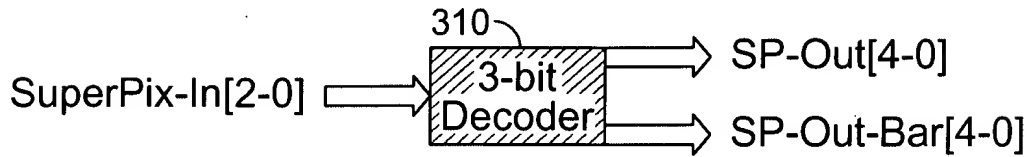


FIG. 3



Superpixel Size	In2	In1	In0	Out4	Out3	Out2	Out1	Out0
1x1	0	0	0	0	0	0	0	0
2x2	0	0	1	0	0	0	0	1
4x4	0	1	0	0	0	0	1	1
8x8	0	1	1	0	0	1	1	1
16x16	1	0	0	0	1	1	1	1
32x32	1	0	1	1	1	1	1	1

FIG. 4

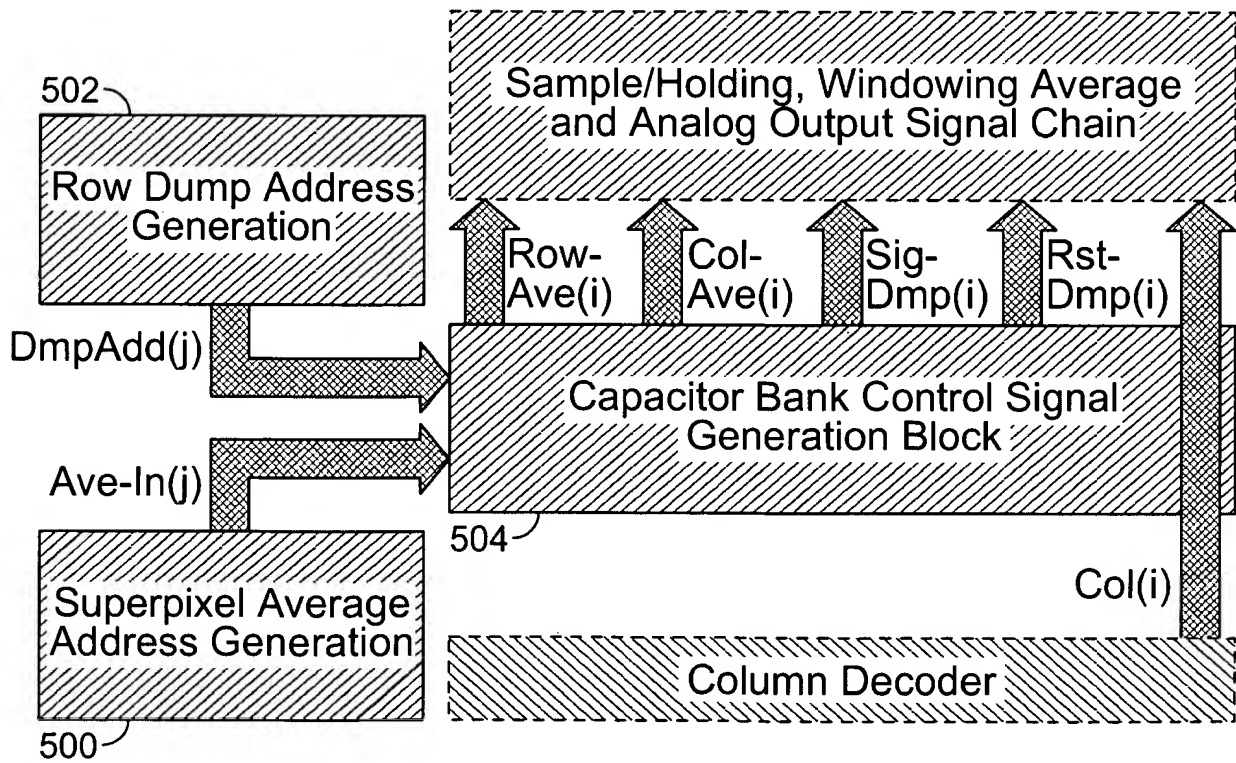


FIG. 5

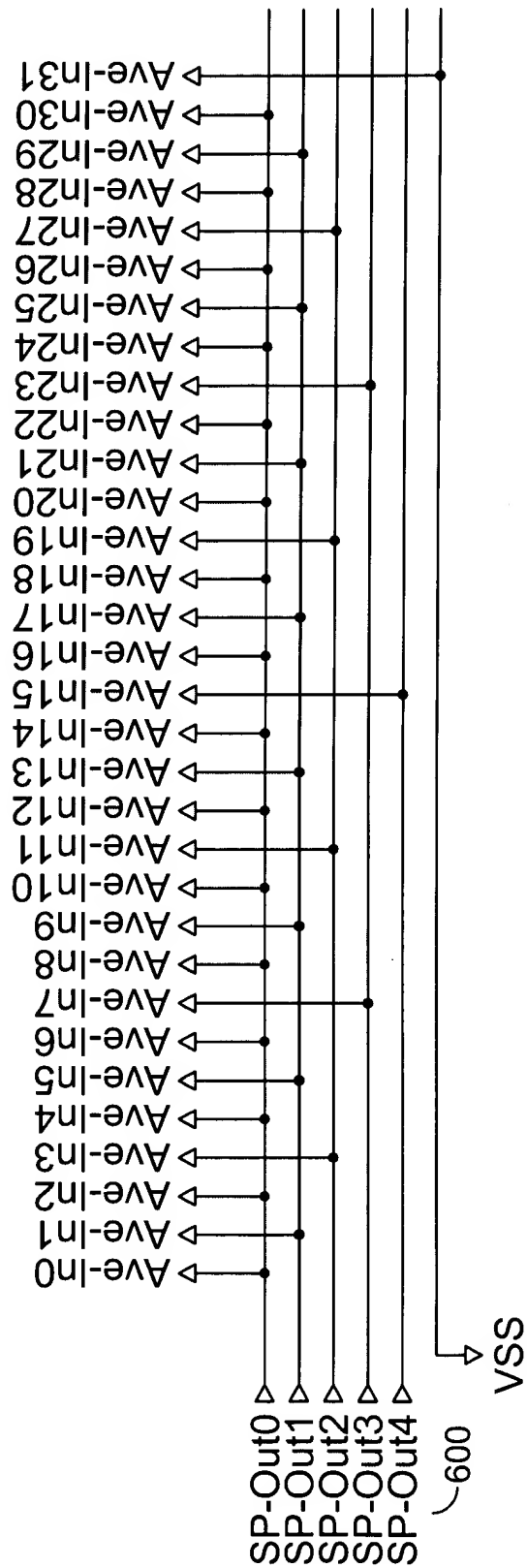


FIG. 6

700 →

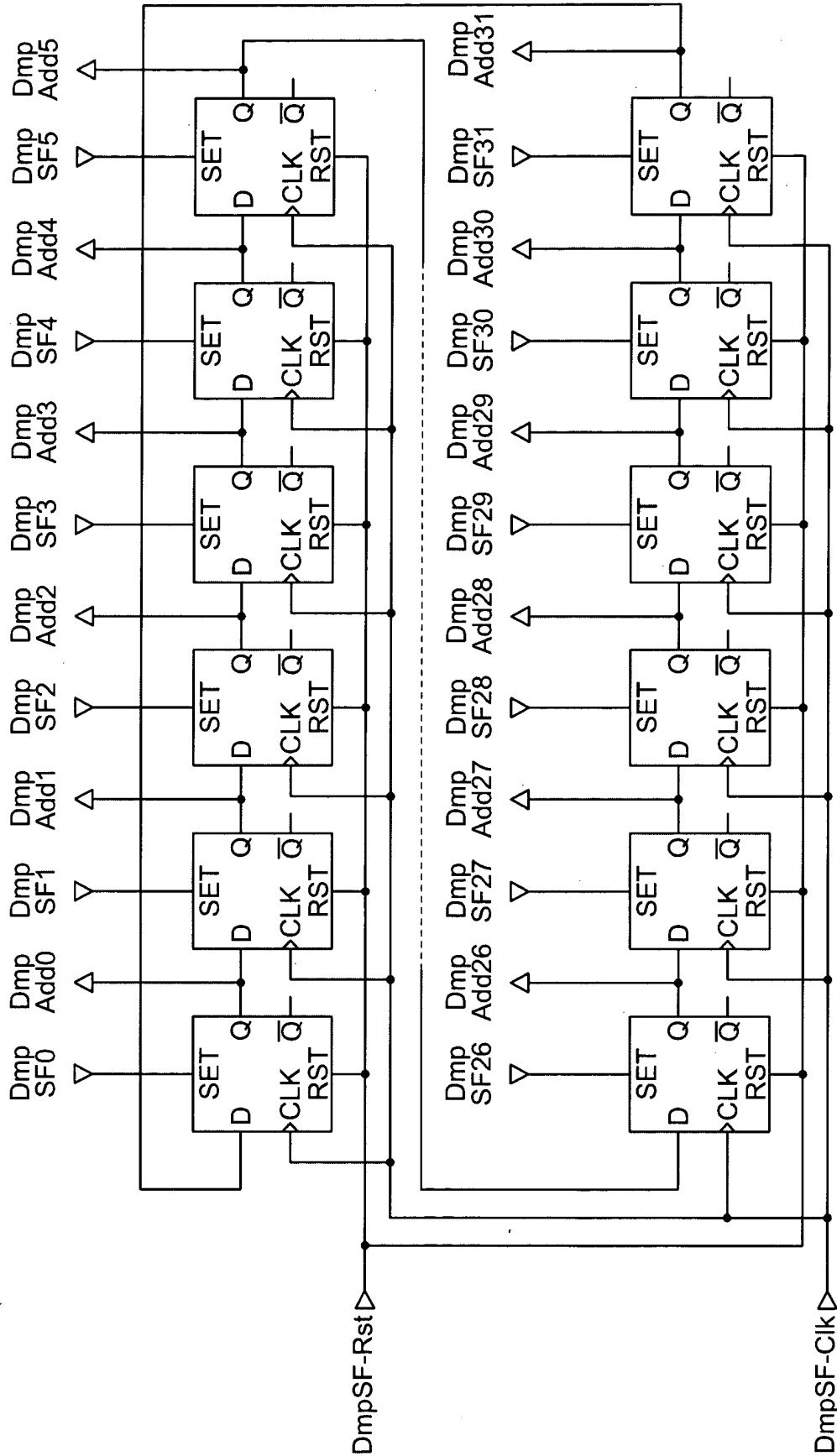


FIG. 7



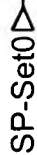


FIG. 8

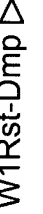


FIG. 9

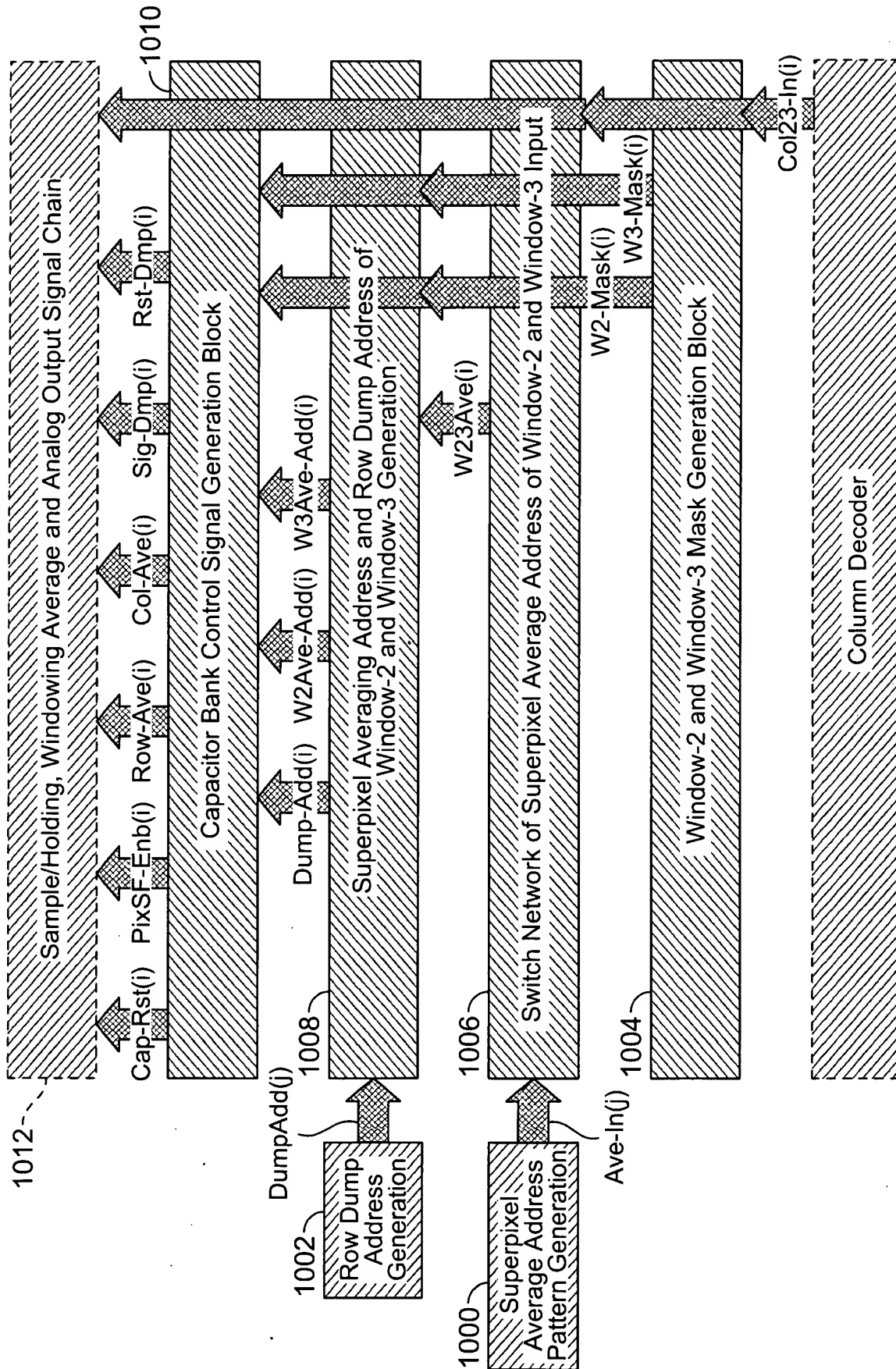


FIG. 10

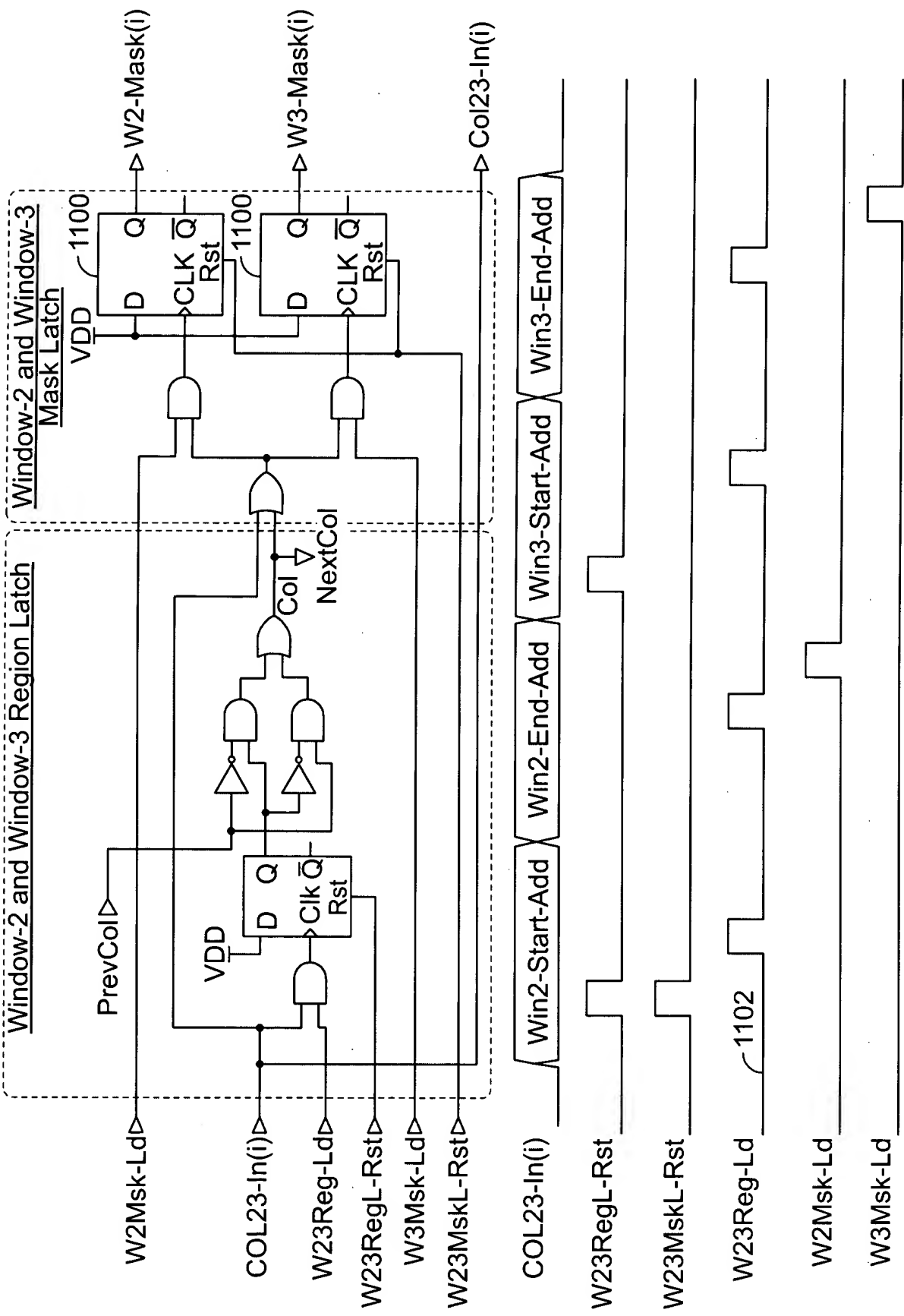


FIG. 11

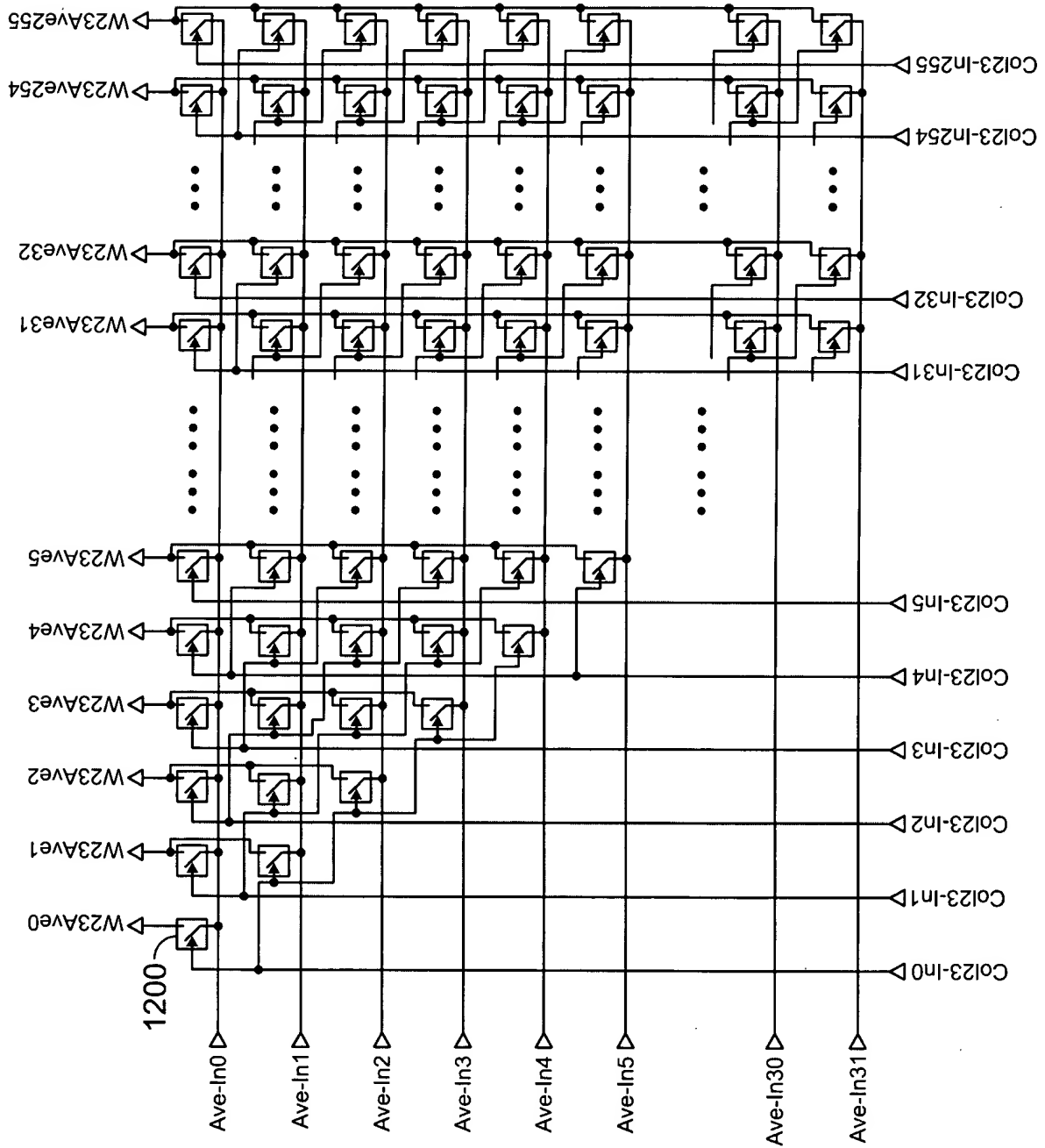


FIG. 12

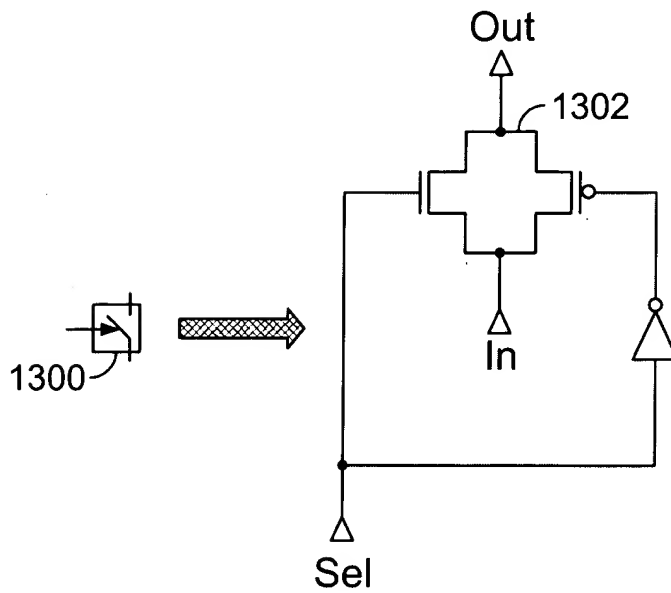


FIG. 13

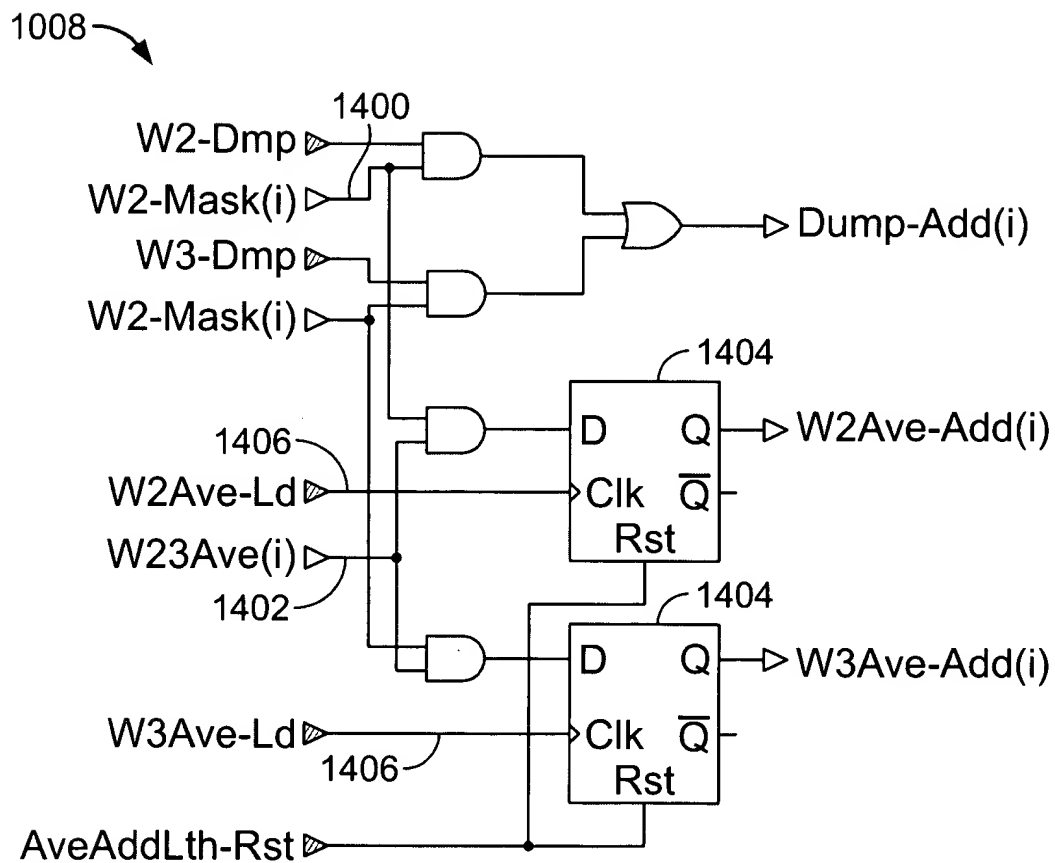


FIG. 14

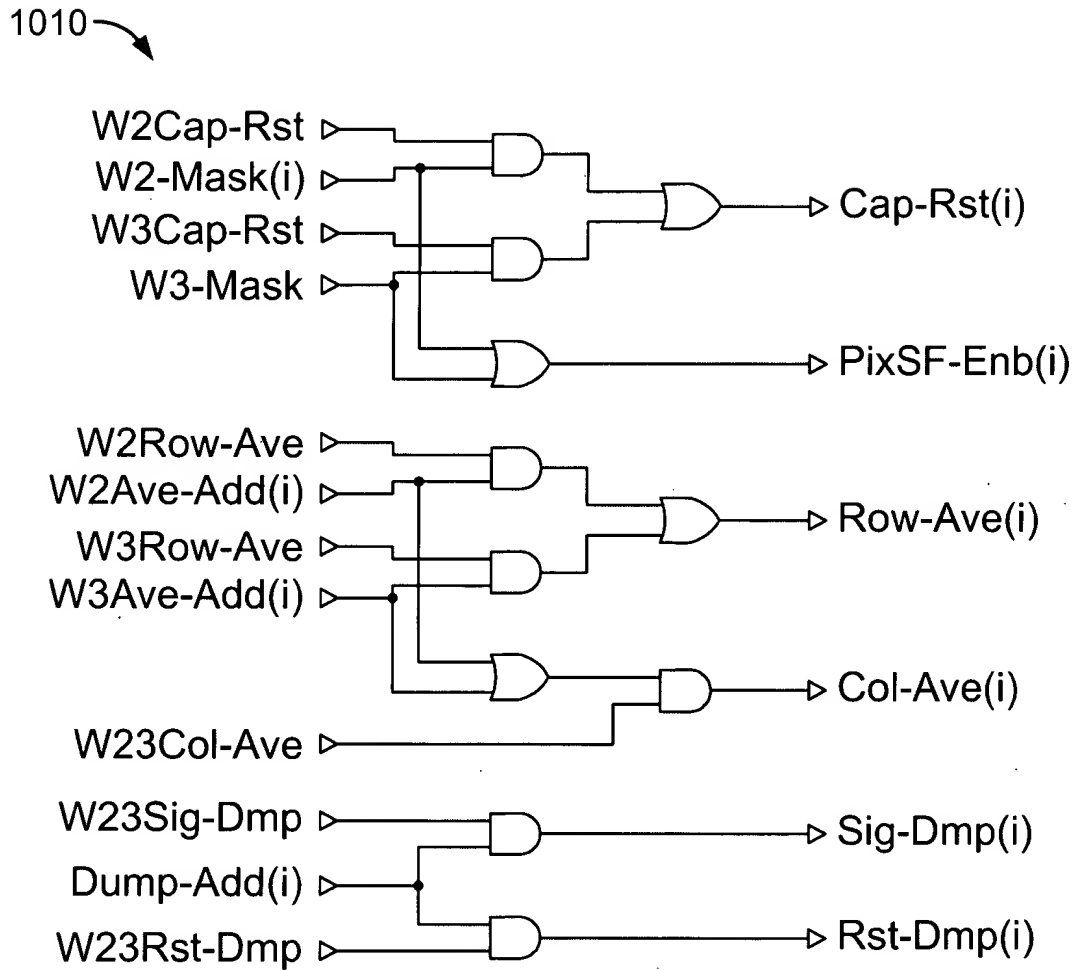


FIG. 15

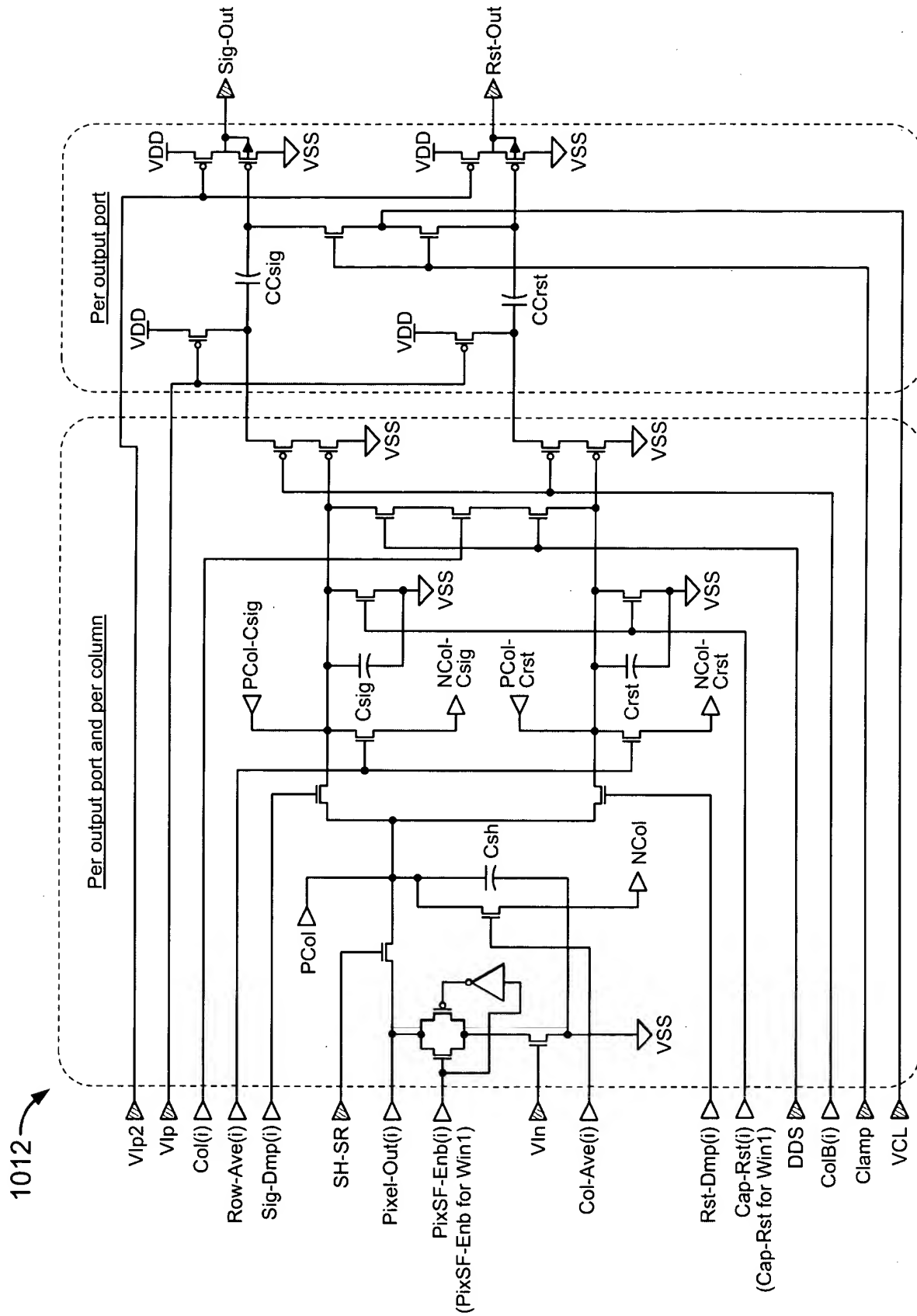


FIG. 16

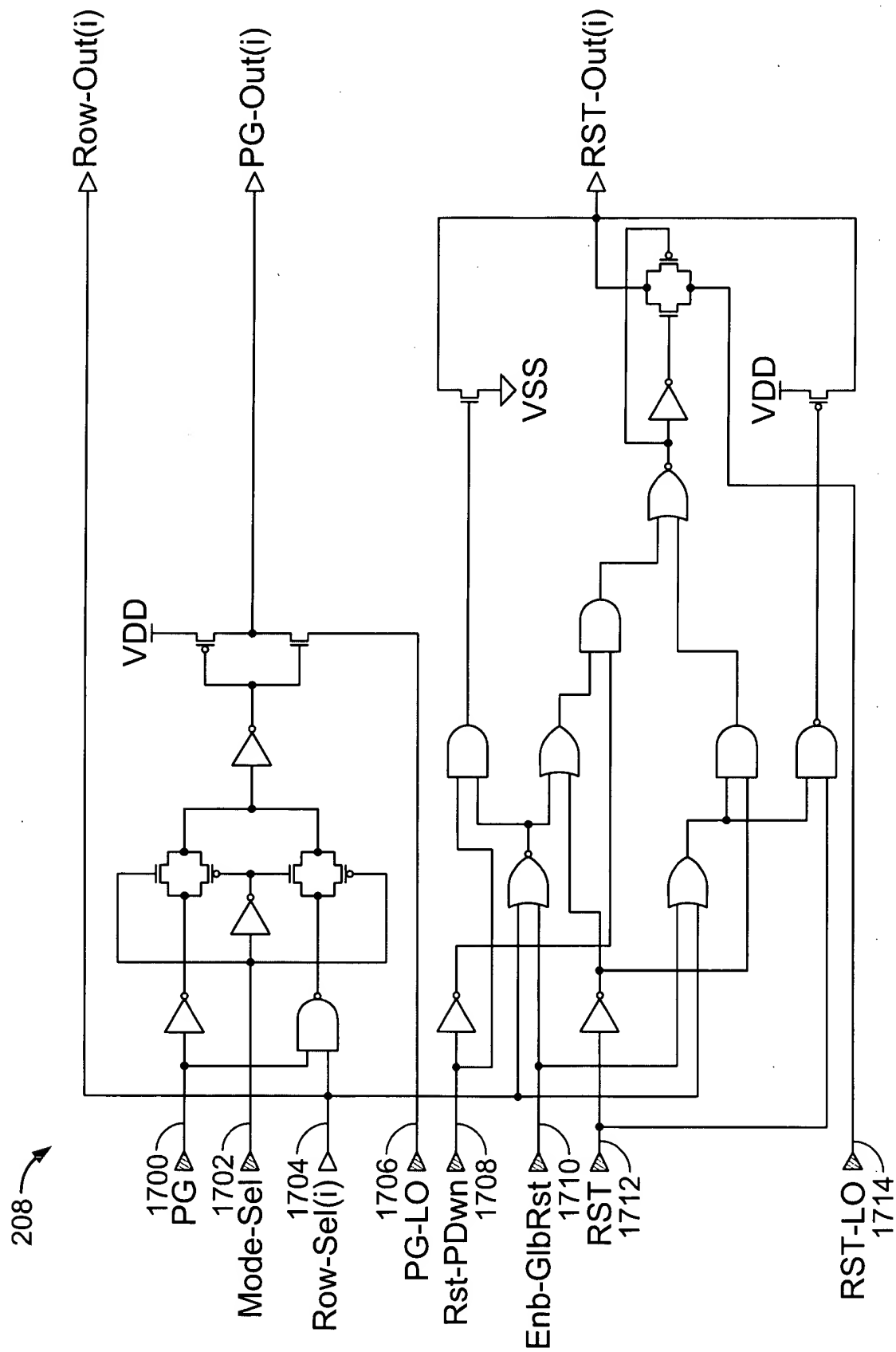


FIG. 17



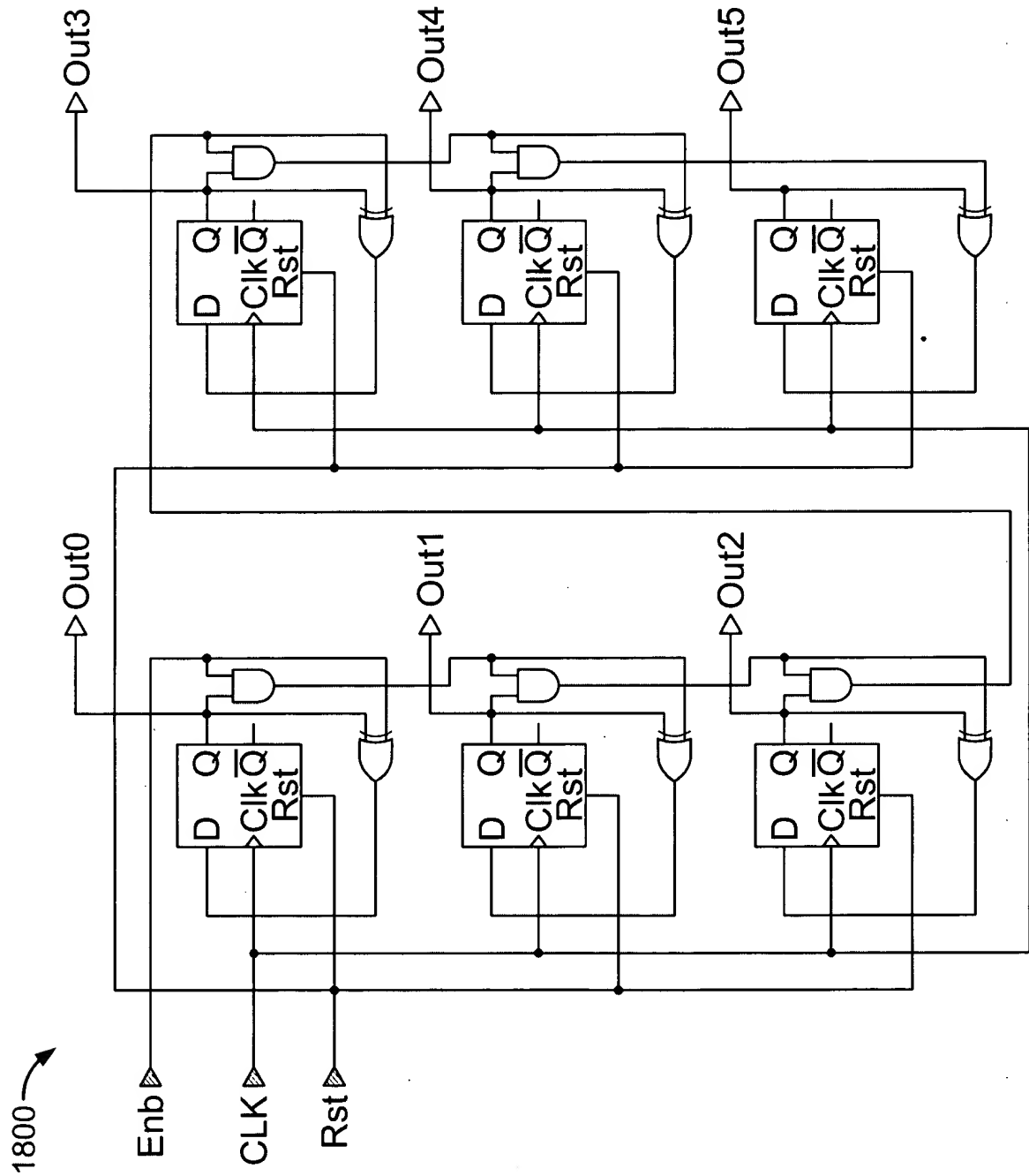


FIG. 18

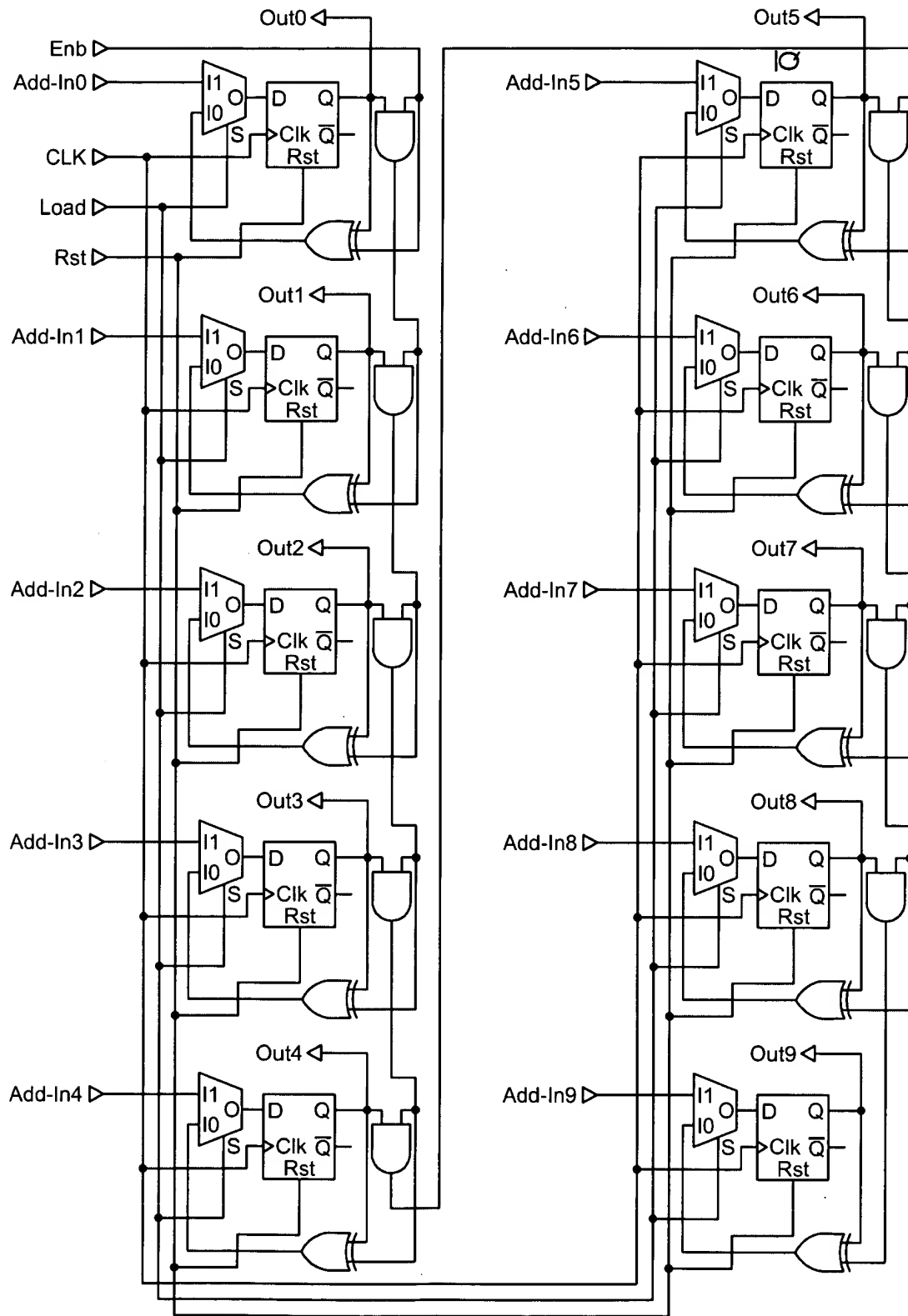


FIG. 19

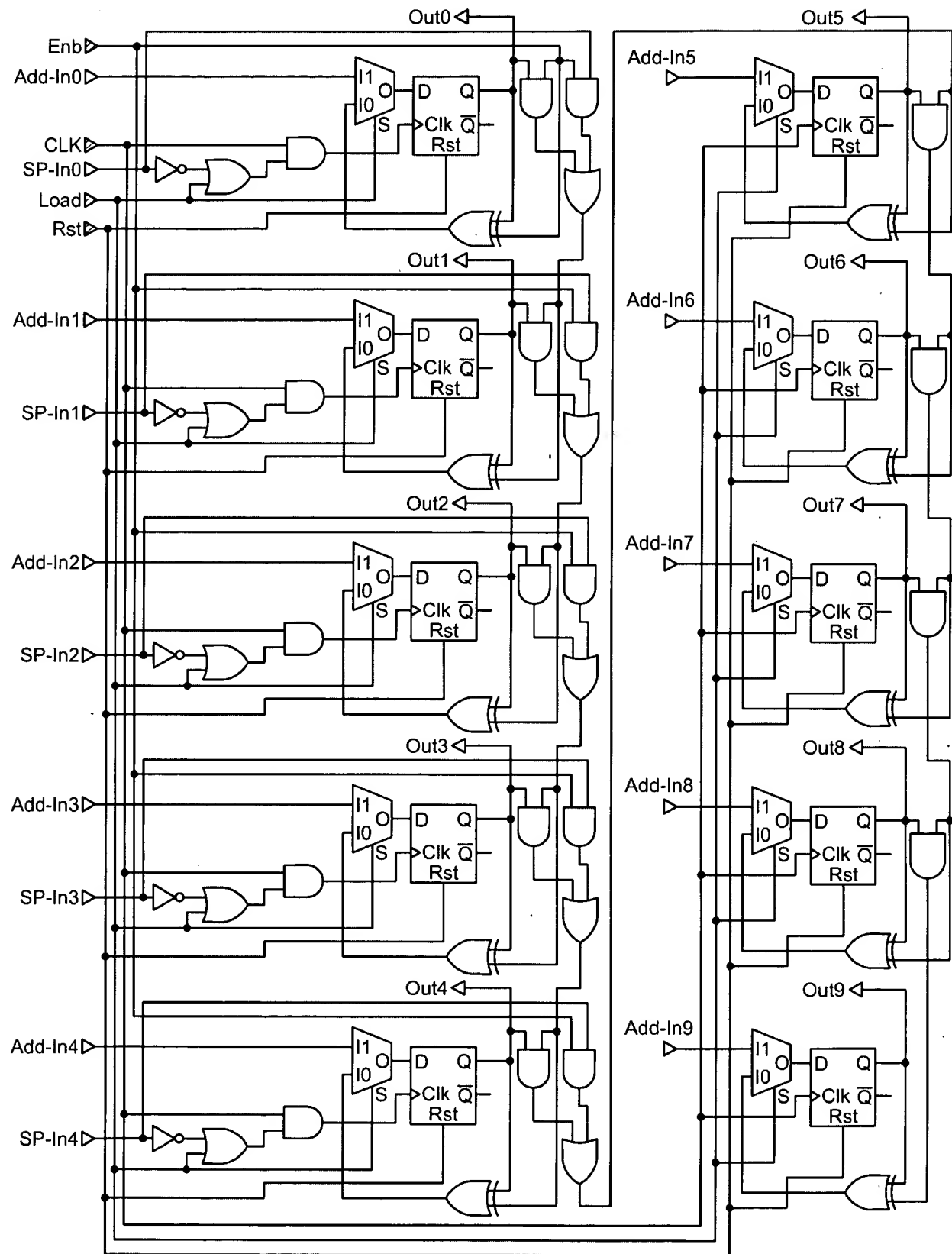


FIG. 20

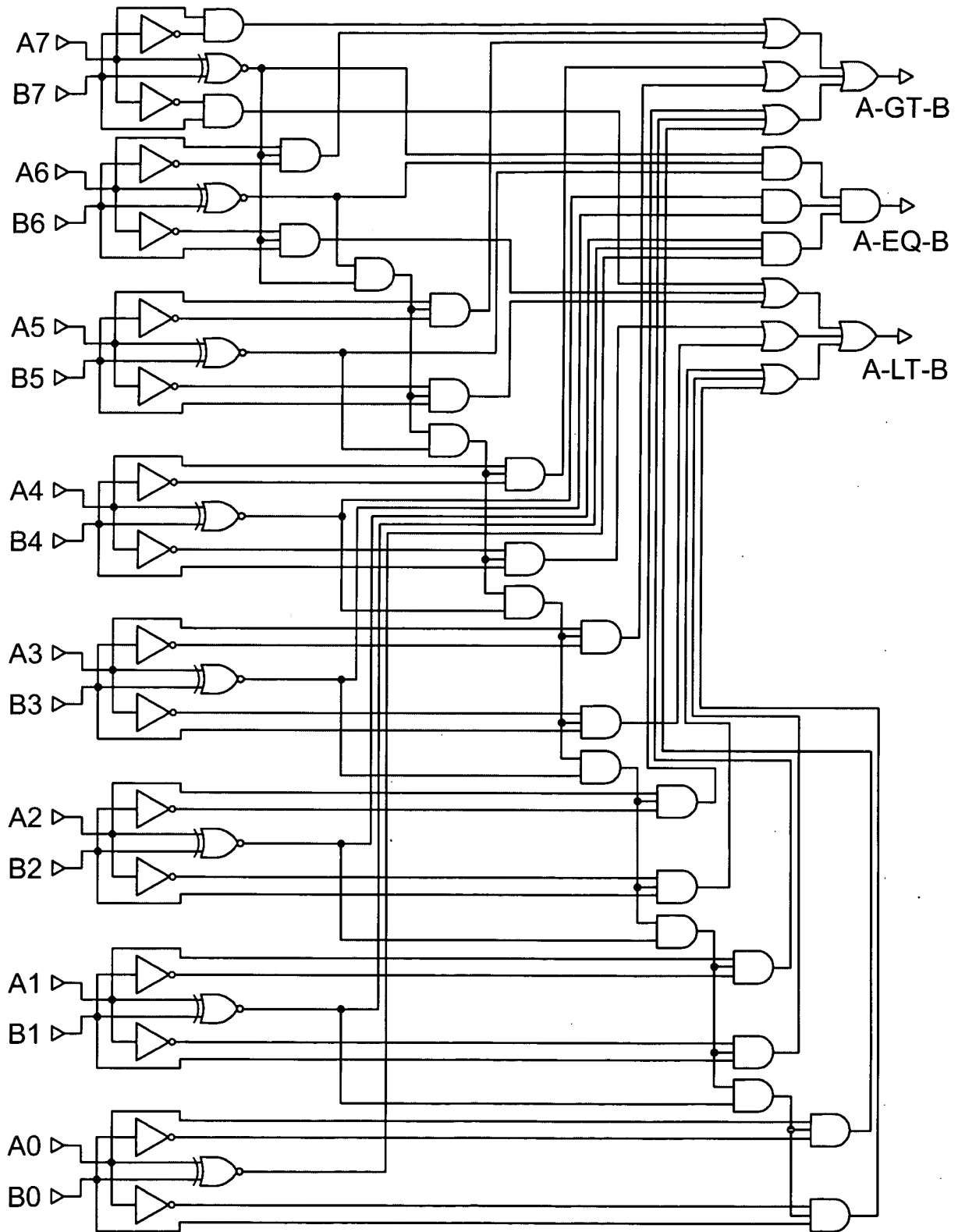


FIG. 21

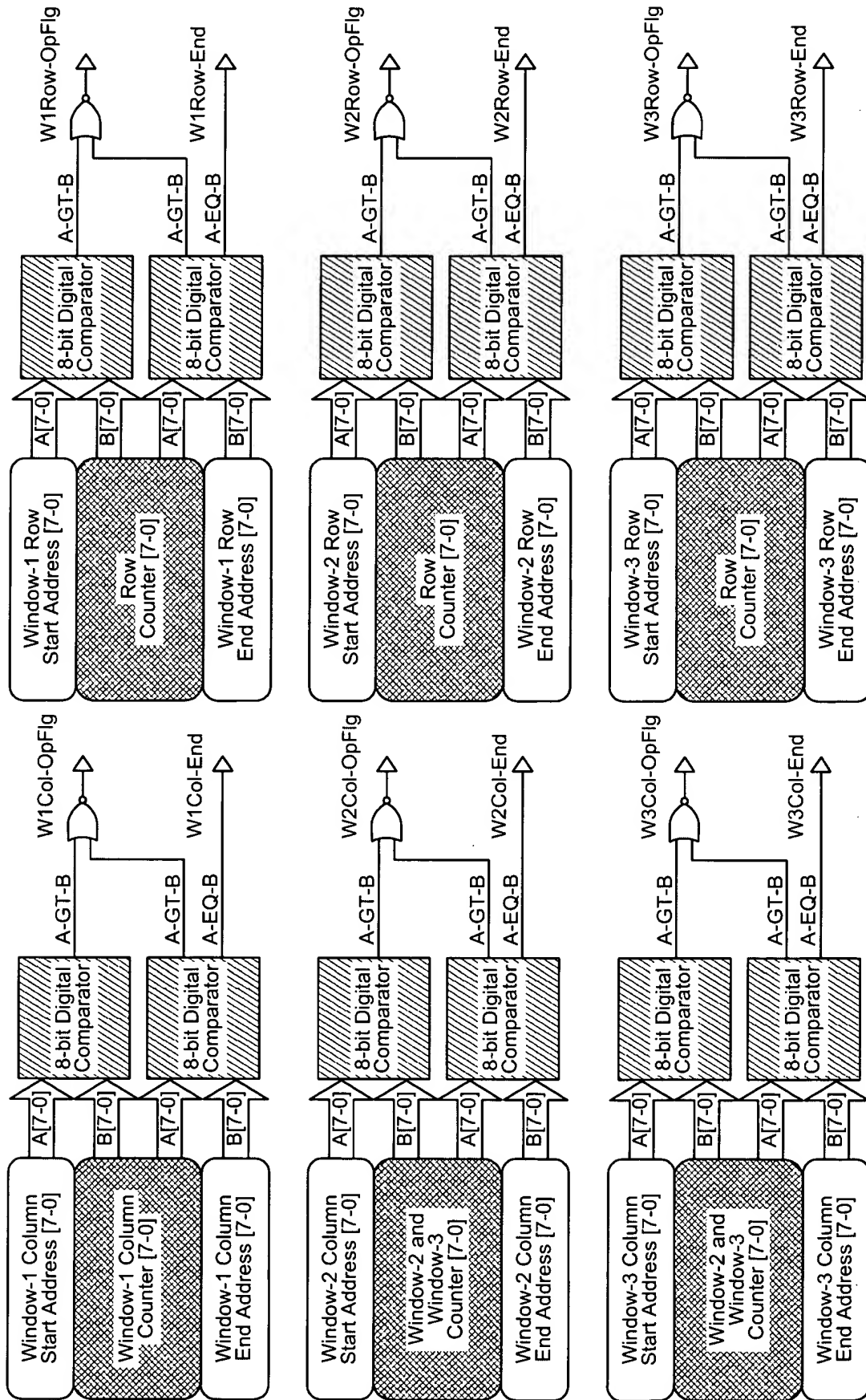


FIG. 22

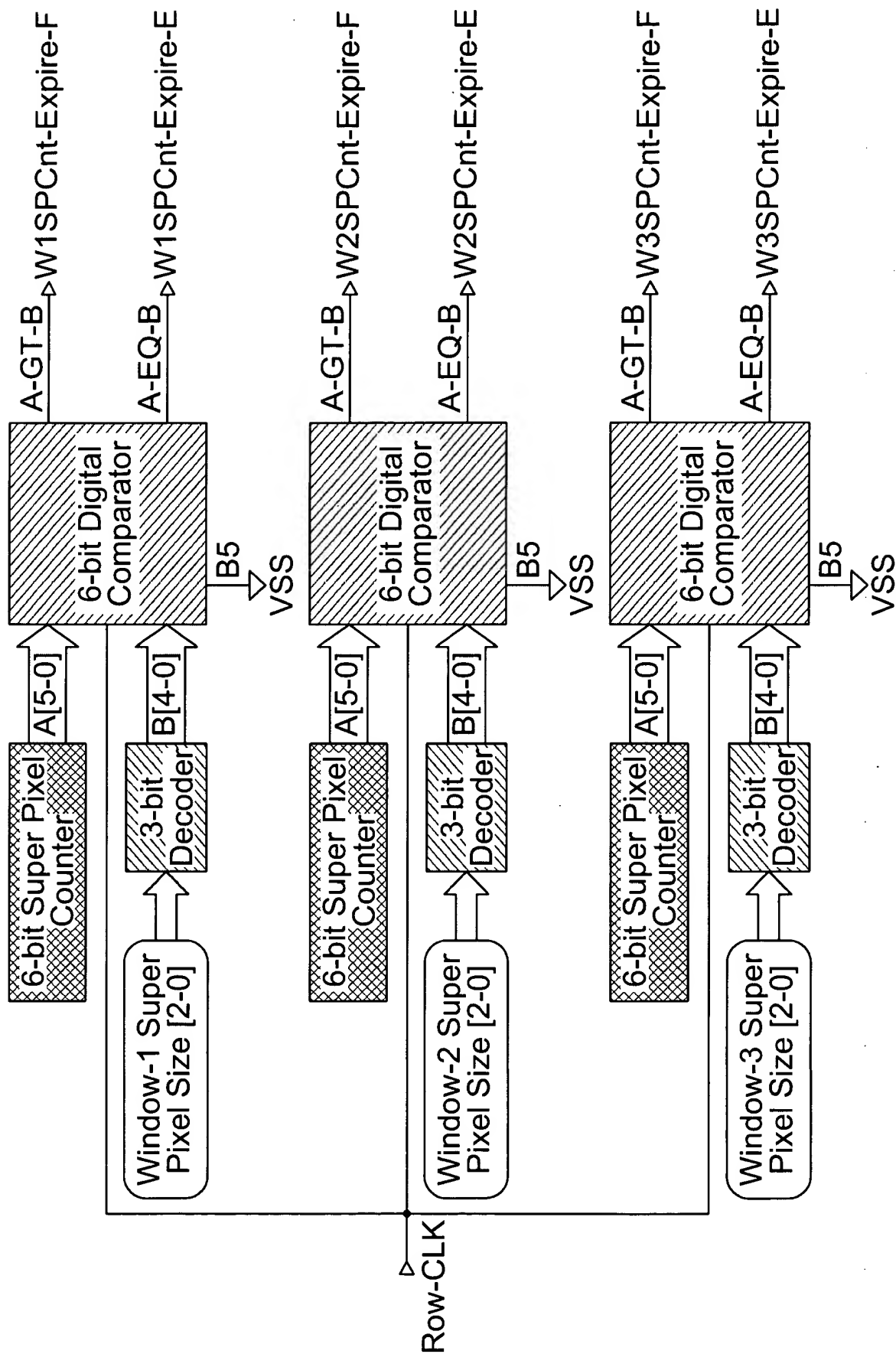


FIG. 23

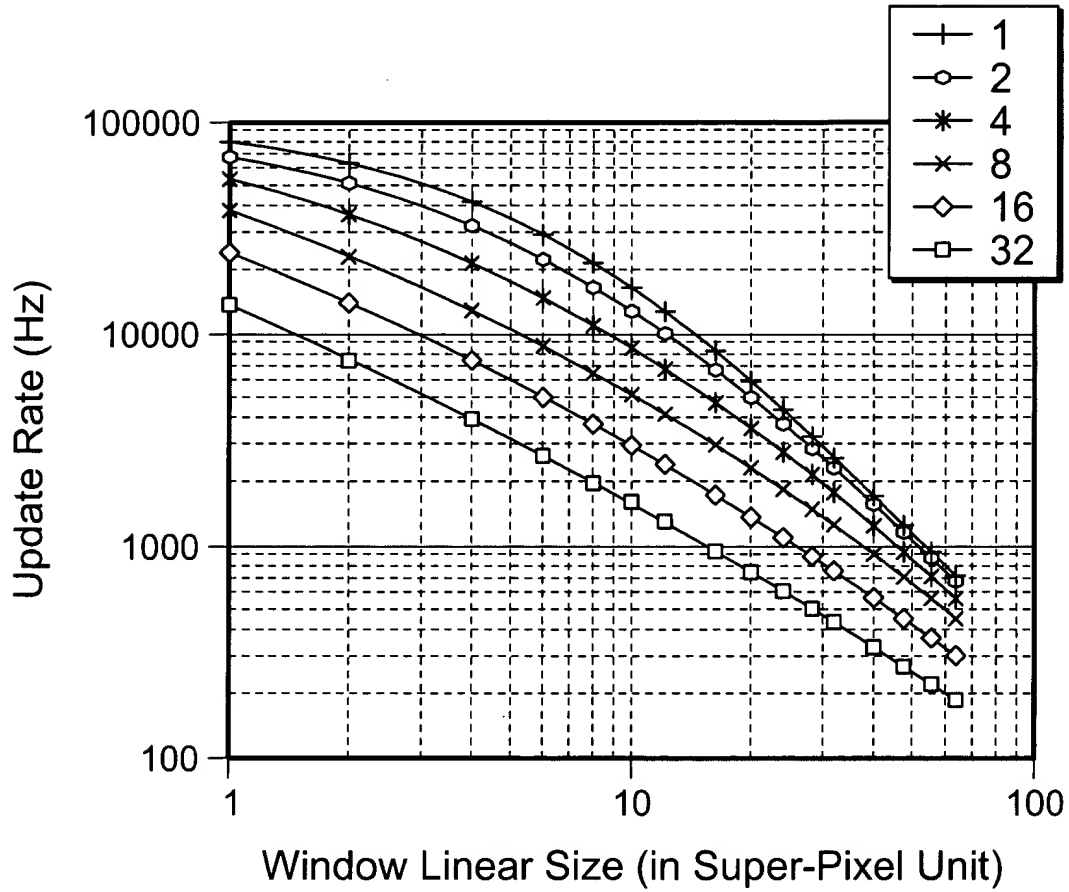


FIG. 24

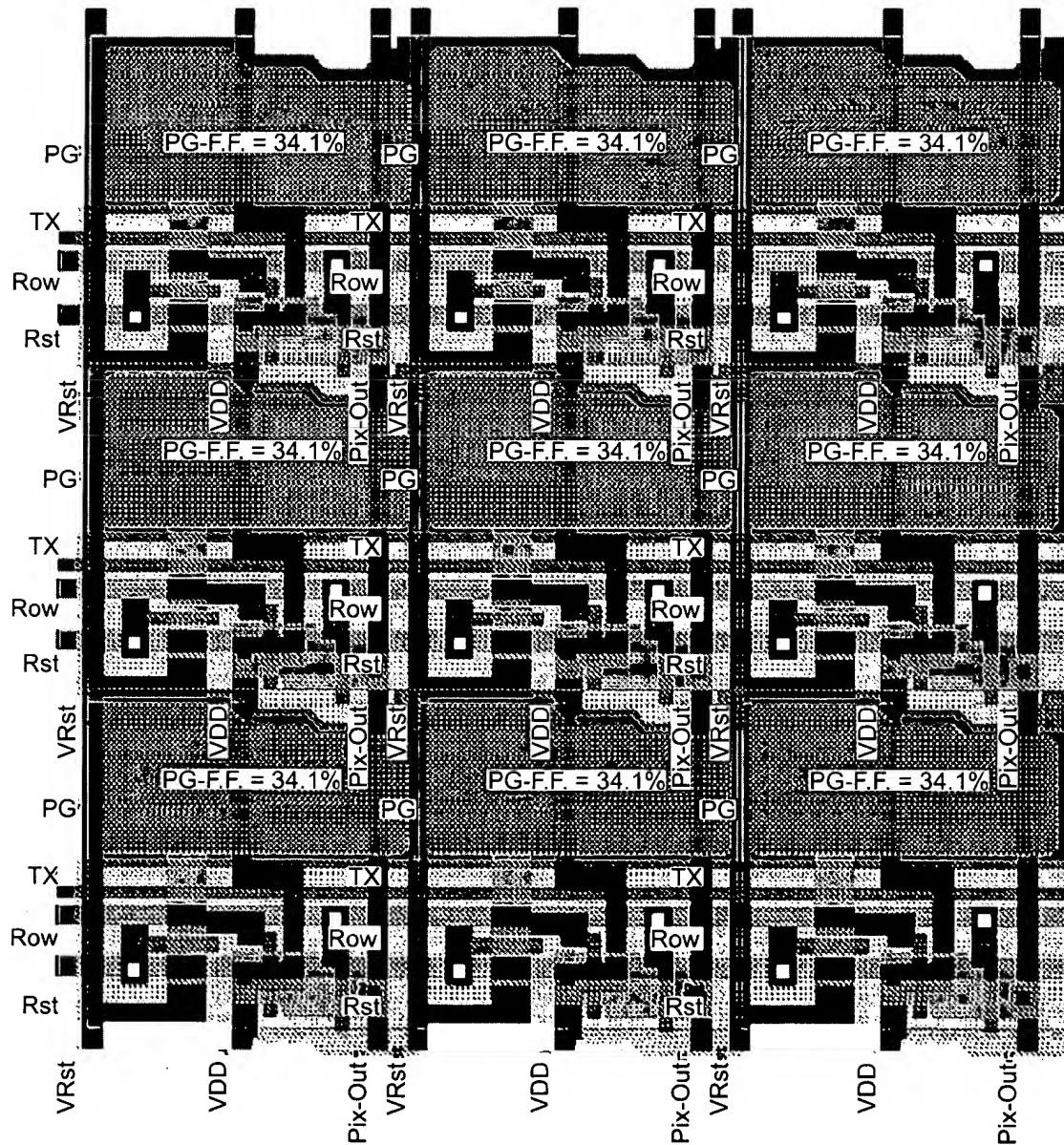


FIG. 25



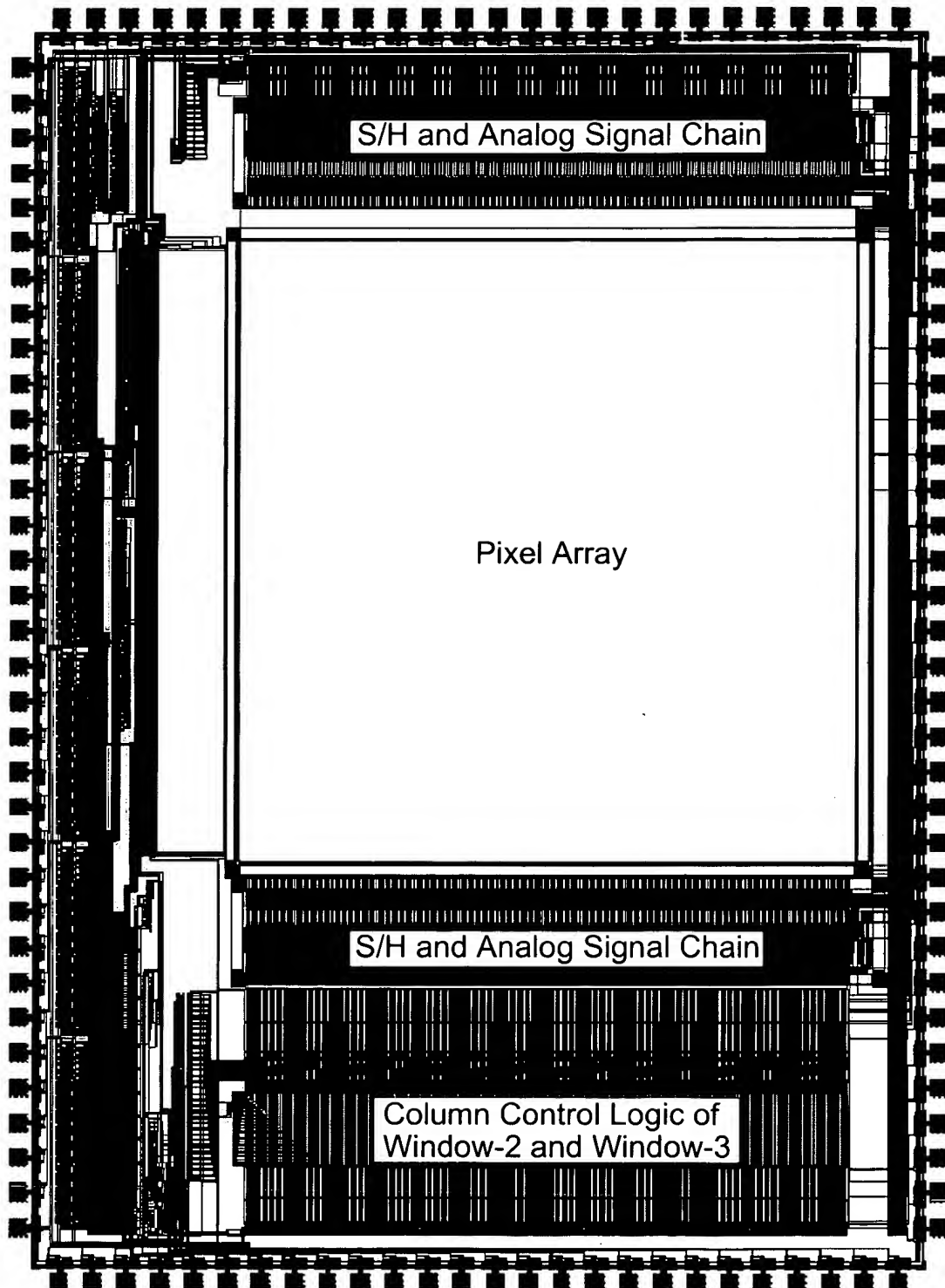


FIG. 26

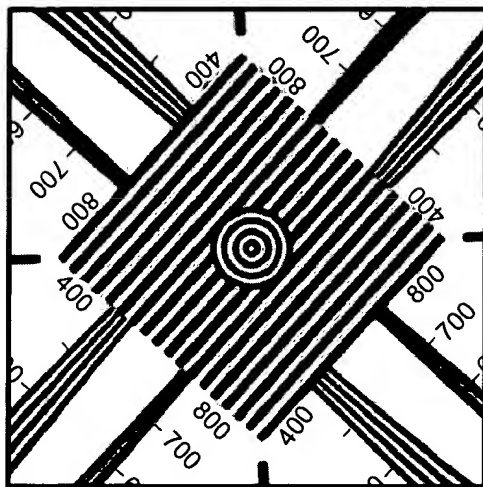


FIG. 27A

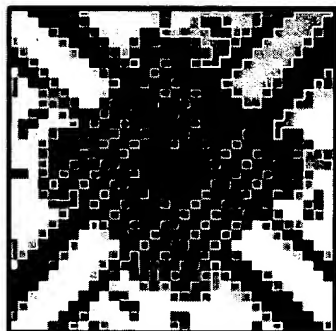


FIG. 27B

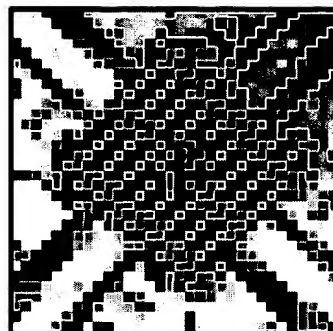


FIG. 27C

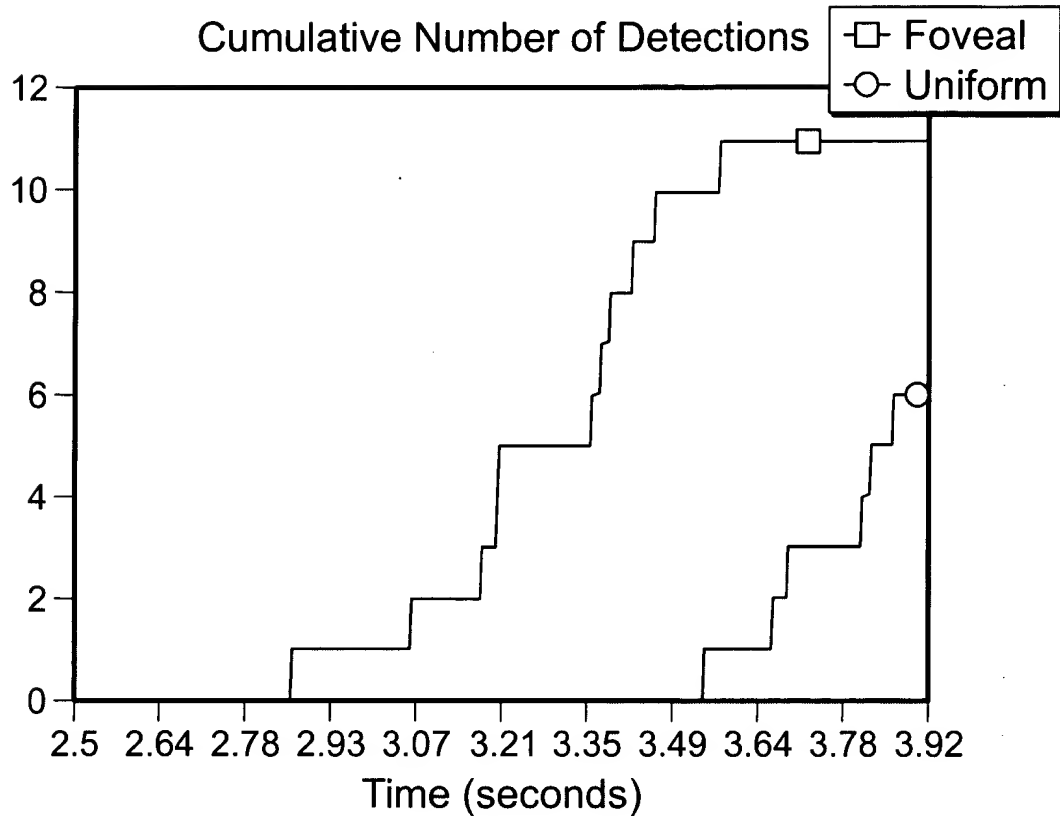


FIG. 28A

Imager Performance Characteristics

Characteristics	Values
Imager Format	256x256
Pixel Pitch	15 $\mu\text{m}$ x 15 $\mu\text{m}$
Number of Simultaneous ROIs	3
Max. Update Rate	100 kHz
Super-pixel Sizes	1x1, 2x2, 4x4, 8x8, 16x16, 32x32
Power Dissipation	< 10 mW
Noise	< 7 Electrons
Dark Current	100 pA/cm <sup>2</sup>
Quantum Efficiency	22%

FIG. 28B